

Amendments to the Claims

1. (*Currently Amended*) An electric device (~~1, 100~~) with a body (~~2, 101~~) having:
~~[[]]~~ a resistor (~~36, 250~~) comprising a phase change material which is able to be in a first phase and in a second phase, the resistor (~~36, 250~~) having a surface with a first contact area (~~5, 132~~) and a second contact area (~~6, 272~~), the resistor (~~36, 250~~) having an electrical resistance between the first contact area (~~5, 132~~) and the second contact area (~~6, 272~~), the electrical resistance having a first value when the phase change material is in the first phase and a second value when the phase change material is in the second phase,
~~[[]]~~ a first conductor (~~3, 130~~) electrically connected to the first contact area (~~5, 132~~),
~~[[]]~~ a second conductor (~~4, 270~~) electrically connected to the second contact area (~~6, 272~~),
~~[[]]~~ the first conductor (~~3, 130~~), the second conductor (~~4, 270~~) and the resistor (~~36, 250~~) being able to conduct a current for heating of the phase change material to enable a transition from the first phase to the second phase, and
~~[[]]~~ a layer (~~20, 39, 126, 140, 260~~) of a dielectric material for reducing a heat flow to parts of the body (~~2, 101~~) free of the resistor (~~36, 250~~) during the heating, the dielectric material comprising a porous material with pores having a size between 0.5 and 50 nm.
2. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, wherein the pores have a size between 1 and 10 nm.
3. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, wherein the pores are substantially free of water.
4. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, wherein the pores have hydrophobic surfaces.
5. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 4, wherein the porous material comprises an organosilicate and the hydrophobic surfaces have hydrocarbyl groups.

6. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 5, wherein the porous material is obtainable by

~~{{}}~~ applying a liquid layer of a composition comprising tetra-alkoxysilane, hydrocarbylalkoxysilane, a surfactant and a solvent onto a substrate, wherein the molar ratio between tetra-alkoxysilane and hydrocarbylalkoxysilane is 3:1 at the most, and ~~{{}}~~ heating the liquid layer to remove the surfactant and the solvent and to form the hydrophobic porous layer.

7. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 6, characterized in that the surfactant is a cationic surfactant, and the surfactant and the totality of alkoxysilanes are present in a molar ratio greater than 0.1:1.

8. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, characterized in that the porous material has a porosity above 20 percent.

9. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, characterized in that the resistor (~~36, 250~~) is embedded in the body (~~2, 101~~), the layer (~~39, 126, 140, 260~~) being in direct contact with the resistor (~~36, 250~~).

10. (*Currently Amended*) An electric device (~~100~~) as claimed in claim 9, characterized in that the first contact area (~~132~~) is smaller than the second contact area (~~272~~), and the first conductor (~~130~~) comprises a part in direct contact with the first contact area (~~132~~), the part being embedded in the layer (~~126, 140~~).

11. (*Currently Amended*) An electric device (~~1, 100~~) as claimed in claim 1, characterized in that the first conductor (~~3, 130~~), the second conductor (~~4, 270~~), the resistor (~~36, 250~~) and the layer (~~20, 39, 126, 140, 260~~) constitute a memory element (~~30, 103~~), and the body (~~2, 101~~) comprises:

~~{{}}~~ an array of memory cells, each memory cell comprising a respective memory element (30, 103) and a respective selection device (26, 104), and

~~[[]]~~ a grid of select lines ~~(12, 42, 120, 190)~~, each memory cell being individually accessible via the respective select lines ~~(12, 42, 120, 190)~~ connected to the respective selection device ~~(26, 104)~~.

12. (*Currently Amended*) An electric device ~~(100)~~ as claimed in claim 11, characterized in that:

~~[[]]~~ the selection device ~~(104)~~ comprises a metal oxide semiconductor field effect transistor having a source region ~~(110)~~, a drain region ~~(112)~~ and a gate region ~~(116)~~, and

~~[[]]~~ the grid of select lines comprises N first select lines ~~(190)~~,

M second select lines ~~(120)~~, N and M being integers, and

an output line ~~(271)~~, the first conductor ~~(130)~~ of each memory element ~~(103)~~ being electrically connected to a first region selected from the source region ~~(110)~~ and the drain region ~~(112)~~ of the corresponding metal oxide semiconductor field effect transistor, the second conductor ~~(270)~~ of each memory element ~~(103)~~ being electrically connected to the output line ~~(271)~~, a second region of the corresponding metal oxide semiconductor field effect transistor which is selected from the source region ~~(110)~~ and the drain region ~~(112)~~ and which is free from the first region, being electrically connected to one of the N first select lines ~~(190)~~, the gate region ~~(116)~~ being electrically connected to one of the M second select lines ~~(120)~~.